

**COMMENTS OF THE COMMONWEALTH OF MASSACHUSETTS DIVISION OF ENERGY RESOURCES TO THE ORDER PROMULGATING PROPOSED GUIDELINES TO EVALUATE AND APPROVE ENERGY EFFICIENCY PROGRAMS; D.T.E. 98-100.**

**I. The Department Can Consider All Economic and Environmental Externality Benefits in the Cost Effectiveness Screening for Energy Efficiency Programs.**

**A. Introduction**

The DOER and the Joint Commenters asked the Department of Telecommunications and Energy ("Department" or "DTE") in D.T.E. 98-100 to expand the scope of benefits to be considered for the cost-effectiveness test for energy efficiency programs to include environmental and economic externalities, and low-income customer benefits. In its recent proposed guidelines from D.T.E. 98-100, the Department concluded that "the Total Resource Cost Test is the appropriate determination of program cost-effectiveness." As defined by the Department, the Total Resource Test requires program administrators to include in the cost-effectiveness test "specific benefits associated with reductions in their own costs directly arising from their energy efficiency programs targeted to low-income customers, such as reductions in late payments." D.T.E. 98-100, § IV. D. 3. Additionally, the Department requires that other "significant benefits of energy efficiency programs to low-income participants, such as reduced loss of service and forced moving costs," should also be included in the Department's cost-effectiveness test. Id.

We support the inclusion of benefits to low-income customers in the cost-effectiveness test. The Department's Order, however, does not directly address the propriety of including external economic costs and benefits – i.e., costs and benefits related to the general Massachusetts economy – in its cost-effectiveness test. Additionally, the Department's Total Resource Test, as defined in D.T.E. 98-100, would exclude consideration of external environmental costs and benefits to participants and non-participants when determining the allocation of funding among competing energy efficiency programs.

The DOER respectfully requests that the Department: (1) clarify that the benefits of energy efficiency programs to the general Massachusetts economy ought to be considered in the evaluation of energy efficiency program cost-effectiveness, and (2) reconsider its decision to exclude the consideration of environmental externalities from its cost-effectiveness test. The DOER proposes that the Department include these economic and environmental benefits in its determination of energy efficiency cost-effectiveness and adopt the Societal Energy Efficiency screening test.

**B. External Economic Benefits**

The DOER and the Joint Commenters argued that there are numerous benefits to the general Massachusetts economy that would accrue to program participants and non-

participants alike resulting from the implementation of energy efficiency programs. These benefits include:

- Increased employment, job retention, and use of local resources;
- Economic development benefits through re-spending (i.e., multiplier) effects;
- Downward pressure on energy prices by reducing fossil fuel usage; and
- Reduce reliance on energy imports.

These benefits are real and significant and ought to be included in the cost-effectiveness test. Similar to the Department's findings with respect to low-income energy efficiency programs, avoiding "reduced loss of service and forced moving costs" with respect to other residential and business customers is a tangible benefit both to those customers and to the general Massachusetts economy. See D.T.E. 98-100, § IV. D. 3. While these benefits may be relatively greater to low income customers and to society when low income customers realize them, it is clear similar benefits to these classes of customers have more than de minimus value to them and society. In addition, consideration of economic externality benefits in the cost-effectiveness test is clearly consistent with past Department practice. For example, the Department had approved numerous economic development, customer retention, and job retention rates because of the economic benefits such rates would produce for the general Massachusetts economy. Accordingly, we request that the Department clarify that the benefits of energy efficiency programs to the general Massachusetts economy – i.e., economic externalities – must be considered in the evaluation of energy efficiency program cost-effectiveness.

### **C. External Environmental Benefits**

The current state of law, the present structure of the utility industry, and sound energy policy now require the Department to include environmental benefits for both participants and non participants in its determination of the cost-effectiveness of energy efficiency programs. The SJC's decision in Massachusetts Electric Co. v. Dep't. of Public Utilities, 419 Mass. 239 (1994), (hereinafter "Mass. Electric" or "M.E.Co"), in which the Court clarified the Department's authority in environmental matters and affirmed the DPU's primary function as a ratesetting agency, was based on specific statutory requirements and factual circumstances that no longer hold today. Rather, the passage of the Massachusetts Electric Industry Restructuring Act, Chapter 164 of the Acts of 1997 ("Act"), and the radical changes in the structure of the utility industry resulting from the Act, requires the consideration of environmental benefits for both participants and non participants in energy efficiency program cost-effectiveness. We base our position on the following points:

1. As a result of the Act, the Department no longer must determine the appropriate trade-off between investment in generation resources and investment in energy efficiency resources. Therefore, including externalities does not result in any additional expenditures of ratepayer funds than would occur without their consideration. Before the Act, the Department determined appropriate levels of investment in both supply- and demand-side resources through its Integrated

Resource Management ("IRM") process outlined in 220 C.M.R. 10.00. As a result of the Act, the appropriate level of investment in generation resources is now determined by market participants and not by the Department pursuant to the administrative process. Accordingly, the sole purpose behind the cost-effectiveness test in a post-restructured world is to determine which among competing energy efficiency programs ought to receive a share of the legislatively mandated level of funding and to prioritize programs based on cost effectiveness.

2. Before the Act, the Department was required to determine how much funding ought to be dedicated to additional energy efficiency instead of additional generation. Because additional energy efficiency almost always creates greater environmental benefits compared to additional generation, consideration of environmental externalities in the cost-effectiveness test within the context of IRM could have resulted in a level of energy efficiency investment that would have raised utility rates. Higher rates could result because the avoidance of electric generation to reduce environmental impacts could have been shown to be very beneficial. This in turn would justify a higher amount of ratepayer funds to finance the implementation of energy efficiency programs in order to avoid highly polluting, but potentially lower cost, electric generation. However, in a post restructured world there is no risk of higher rates due to increased energy efficiency, even if programs are shown to be cost effective due to their external benefits.

3. At the time of M.E.Co., the SJC defined the Department's role as primarily a ratesetting agency.

The SJC determined that as a ratesetting agency, the Department's authority to regulate environmental impacts is limited to the costs to ratepayers associated with those impacts, but that the legislature and agencies to which such authority is delegated, such as environmental agencies, have the authority to protect the environment. D.T.E. 98-100, § III. C., quoting D.P.U. 96-100.

Several years after the SJC handed down Mass.Electric, however, the legislature authorized and mandated that a specific rate be charged for the sole purpose of funding energy efficiency programs.<sup>4</sup> Essentially, the Act establishes the just and reasonable rate by which to finance energy efficiency activities for at least five years. Additionally, the Act explicitly prohibits the assessment of energy efficiency charges above the levels authorized and required by the Act. Clearly, the Act has redefined the Department's ratesetting authority subsequent to M.E.Co., especially with regard to energy efficiency activities. Additionally, given that the rate which finances energy efficiency programs has been established by the legislature, there is no incremental rate impact associated with energy efficiency activities having greater environmental and economic benefits relative to other energy efficiency programs. No matter which energy efficiency

programs are financed, the rate established by the legislature for energy efficiency activities remains the same.

4. After passage of the Act, the market, not the Department, ought to determine the appropriate level of investment in generation resources. Thus, regulated distribution companies, and the Department regulating them, no longer need to allocate scarce funds between competing supply- and demand-side resources. Since regulated distribution companies are no longer responsible for the generation function, and since the rate financing future energy efficiency activities was fixed by the legislature, spending on energy efficiency does not adversely affect the cost of service of regulated distribution companies, and, thus, does not adversely affect the rates paid by ratepayers.

5. As mentioned above, the purpose of the cost-effectiveness test at this time is to determine which energy efficiency options ought to receive funding and to prioritize among those that are cost effective. If the rate impact among all energy efficiency options is the same and if the rate level for energy efficiency has already been established by the legislature, then *energy efficiency activities have no adverse impact on regulated distribution company costs*. Accordingly, the Department's consideration of the differential environmental and economic impacts of competing energy efficiency programs in its cost-effectiveness evaluation is not constrained by the holding in Mass. Electric.

6. If the total environmental and economic benefits were not considered in the Department's cost-effectiveness test, then the test would be indifferent between two programs that cost the same and produce the same direct energy and participant cost savings, even if one of the programs produced superior environmental and other economic characteristics. Good policy requires that the program with superior environmental and economic characteristics be favored.

7. Since the Act mandates that "*enhanced environmental protection goals*" is a primary element of electric industry restructuring, the Department is legally obligated to consider the environment when determining energy efficiency program funding.<sup>5</sup> According to the Act, the Department is the final arbiter with respect to energy efficiency program expenditures - environmental agencies have no jurisdiction over these programs.<sup>6</sup> Additionally, while environmental agencies regulate the emissions of power plant facilities, they do not establish relative environmental improvement standards or requirements associated with competing energy efficiency programs. Clearly, the final disposition of energy efficiency programs is within the Department's jurisdiction, not the jurisdiction of the Commonwealth's environmental agencies.

8. If the Department were to ignore environmental criteria when determining the allocation of energy efficiency funding among competing energy efficiency programs, the legislature's mandate that restructuring result in "*enhanced environmental protection goals*" would be frustrated.<sup>7</sup> Enhancing environmental

protection goals requires the Department to explicitly consider environmental benefits and costs in determining energy efficiency fund allocations. It is not enough for the Department to rely on the incidental environmental benefits that most energy efficiency activities tend to create. Rather, the statute requires the Department to "enhance" environmental protection, that is, to consider the environmental benefits of energy efficiency programs. Hence, DOER views the Act as authorizing the Department to consider the total range of environmental externalities in its consideration of energy efficiency program cost-effectiveness.

In summary, we request that the Department approve the use of the Societal Test for determining energy efficiency program cost-effectiveness. The Societal Test is the only test that considers the full range of environmental and economic costs and benefits of competing energy efficiency programs. Such a cost-effectiveness test would be used to determine which energy efficiency options ought to be funded and to prioritize amongst those choices. As outlined above, such a test is necessitated on both policy and legal grounds, especially in light of the Act and the recently restructured utility industry.

## **II. Rationale for a Generic Environmental Economic Adders**

Energy efficiency that displaces natural gas or electric power generation provides environmental and economic benefits to the entire community, regardless of whether they are program participants or not. Electricity and natural gas, when saved, avoids air pollution, lowers costs for program participants, and lowers overall demand for natural gas and electricity, thereby lowering energy prices. The result is improved air quality for residents and an increased level of discretionary income for the Commonwealth's residents and businesses. Although these environmental and economic benefits are difficult to quantify, they exist. They should be recognized and counted as benefits of energy efficiency. It would be costly to require each energy efficiency program administrator to quantify these benefits. Therefore, DOER recommends that the Department adopt the generic environmental and economic adder quantification method proposed by the Joint Commenters and endorsed by DOER in their April 14, 1999 comments.

The Department's proposed screening test only allows consideration of specific, quantifiable, environmental and economic benefits that accrue to the energy system and participants. DOER does not believe, as a matter of practical policy, that this can be implemented. The costs involved will discourage program administrators from bothering to do the work needed to identify these benefits. Therefore, these benefits will be overlooked. Certain energy efficiency programs, e.g., low income and residential, will not be evaluated for the full range of benefits that they provide and thus may not pass the Department's cost benefit screen merely because the analytic methodology is too burdensome. Without the inclusion of these benefits, program administrators may conclude that they should not propose an equitable allocation of ratepayer energy efficiency funds to residential customers. This would be contrary to the Act which called for ensuring that energy efficiency funds are allocated equitably among customer classes.<sup>8</sup>

If the Department's proposed TRC test were finally adopted, there will be no practical means to account for the full range of environmental and economic benefits contributed by energy efficiency programs. The Department should remedy this through the inclusion of a generic environmental and economic adder to reflect all of the benefits of these programs.

### **III. Shareholder Incentive**

The DOER concurs with the Department's general ruling in D.T.E. 98-100 with respect to shareholder incentives. However, we request clarification on a portion of the ruling concerning the calculation of incentive payments.

In D.T.E. 98-100, § VI. D., the Department stated that

shareholder incentives for the successful implementation of energy efficiency programs "...must reach a balance between two objectives: (1) promoting effective programs and (2) protecting the interest of ratepayers."

According to the Department's Order, incentives shall be based on direct program implementation costs only. D.T.E. 98-100, § VI. D.

The Department's Order, however, does not mention two categories of costs that we believe ought to be included in the Department's list of direct program implementation costs for which incentives should be available. These costs include marketing, and market research and evaluation ("M&E").<sup>1</sup> Such costs are essential to the effective promotion of energy efficiency programs, and to the protection of ratepayer interests.

In order to realize effective programs, companies implementing approved energy efficiency programs must effectively market the programs. Marketing is essential to stimulate customer awareness and acceptance of the energy efficiency programs approved by the Department. Without effective marketing, customers will not realize the direct benefits of these energy efficiency programs because they will not be aware of the existence of the programs, and/or will not know how such programs can benefit them and the community at large. Since inadequate marketing efforts will compromise the achievement of program performance goals, DOER believes that the cost of such efforts should be included in the list of those costs for which shareholder incentives are available.

Similarly, an adequately funded Marketing Research and Evaluation (M&E) effort is essential to protect the interests of ratepayers. This would include the costs associated with assisting the non-utility parties, and thereby ratepayers, to help ensure that energy program administrators are developing the most appropriate programs and are adequately evaluating the programs that are implemented. Without adequate M&E, the Department and others would not know the actual benefits achieved by the programs implemented. Accordingly, scarce energy efficiency funding could be wasted on programs that do not

produce the anticipated benefits, while other programs with greater savings potential could go unfunded. Additionally, M&E estimates the performance of distribution companies relative to pre-established program implementation goals. Thus, M&E are needed to establish the appropriate shareholder incentive level.

Without an incentive on its M&E costs, distribution companies have the incentive to minimize M&E expenditures. If M&E efforts are under-funded, distribution companies are in a better position to claim higher shareholder incentives even if the companies do not actually attain their pre-established performance goals. An adequately funded effort will result in a more accurate estimation of company performance, will result in more appropriate incentive payments, and will enable the Department and others to redirect energy efficiency funding if presently funded programs do not produce the anticipated level of benefits.

In its draft rules, the Department has proposed a cap for the maximum amount a utility can earn and has proposed establishing a three-tiered incentive structure for the level of ratepayer benefits commensurate to what a utility is able to achieve. DOER believes that these two elements are by far the most important factors to ensure that incentives encourage program results and customer benefits. DOER continues to believe that efforts to limit Program Administrator expenses and exclude these costs in the calculation of shareholder incentives, will tend to control these costs.<sup>9</sup>

In summary, we respectfully ask the Department in its Order in D.T.E. 98-100 to clarify that Marketing, and Marketing Research and Evaluation costs, are included in direct program implementation costs for which incentives are available.

**T/policy/no19b12**